

a) a common backplane having a plurality of circuit card connectors disposed in spaced apart relation thereon for supporting circuit cards in a generally upright parallel relationship;

b) a first circuit card mounted to one of said circuit card connectors, said first circuit card having a first transmitter LED and a first receiver photodiode respectively formed thereon;

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c) a second circuit card mounted to another of said circuit card connectors, said second circuit card having a second transmitter LED and a second receiver photodiode respectively formed thereon; and

d) wherein said first and second circuit cards are maintained in fixed relationship to one another via said common backplane to effectuate optical intercard communications therebetween, said intercard communications being conducted independent of shock-susceptible wired connectors such that said first receiver photodiode on said first circuit card is operative to receive signals produced from said second transmitter LED of said second circuit card, said second receiver photodiode being operative to receive signals from said first transmitter LED of said first circuit card.

Sub 2, 2. (Amended) The system of Claim 1 wherein said signals generated by said first and second transmitter LEDs and received by said first and second receiver photodiodes comprise optically transmitted infrared radiation.

3. (Amended) The system of Claim 2 wherein said transmission and reception of signals between said first and second transmitter LEDs and said first and second receiver photodiodes comprise a standardized infrared communications scheme protocol.

A2 5. (Amended) The system of Claim 1 wherein said first and second circuit cards are housed within an enclosure.

~~7. (Amended) The system of Claim 1 wherein said system comprises a multiplicity of circuit cards wherein each respective one of said multiplicity of circuit cards has a dedicated transmitter LED and receiver photodiode formed thereon, each respective one of said multiplicity of circuit cards being operative to transmit and receive data via said transmitter LED and said receiver photodiode formed thereon with the respective other circuit cards of said multiplicity of circuit cards.~~

A3 Sub 2, 8. (Amended) A method for operatively interconnecting circuit cards within a computer to enable data to be transmitted and received therebetween comprising:

- a) forming a common backplane having a plurality of circuit card connectors disposed in spaced apart relation

thereon for supporting circuit cards in a generally parallel upright relationship;

b) providing a first circuit card having a first transmitter LED diode and a receiver photodiode respectively formed thereon;

c) providing a second circuit card having a second transmitter LED and a second receiver photodiode respectively formed thereon;

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d) mounting said first circuit card to one of said circuit card connectors;

e) mounting said second circuit card to another of said circuit card connectors; and

f) spatially arranging said first circuit card relative to said second circuit card via the common backplane to effectuate optical intercard communications therebetween, said intercard communications being conducted independent of shock-susceptible wired connectors such that said first receiver photodiode on said first circuit card is operative to receive signals produced from said second transmitter LED of said second circuit card, said second receiver photodiode being operative to receive signals from said first transmitter LED of said first circuit card.

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9. (Amended) The method of Claim 8 wherein step e), said

signals generated by said first and second transmitter LEDs and received by said first and second receiver photodiodes comprise optically transmitted infrared radiation.

10. (Amended) The method of Claim 8 wherein in step f), said transmission and reception of signals between said first and second transmitter LEDs and said first and second receiver photodiodes comprise a standardized infrared communications scheme protocol.

11. (Amended) The method of Claim 8 wherein in step f), said infrared communications scheme protocol comprises a protocol developed by the Infrared Data Association.

12. (Amended) The method of Claim 8 wherein step f), said first and second circuit cards are housed within an enclosure.

13. (Amended) The method of Claim 8 wherein in step f), said first and second circuit cards are operative to run an embedded application.

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~~14. (Amended) The method of Claim 8 wherein step f), said system comprises a multiplicity of circuit cards wherein each respective one of said multiplicity of circuit cards has a dedicated transmitter LED and receiver photodiode formed thereon, each respective one of said multiplicity of circuit cards being operative to transmit and receive data via said transmitter LED and receiver photodiode formed thereon with the respective other circuit cards of said multiplicity of circuit cards.~~

Please add the following new Claims:

5bC37 15. (New) A shock-resistant system for operatively interconnecting circuit cards within a computer system to enable data to be transmitted and received therebetween comprising:

a) a common backplane having a plurality of circuit card connectors disposed in spaced apart relation thereon for supporting circuit cards in a generally upright parallel relationship;

b) a first circuit card mounted to one of said circuit card connectors, said first circuit card having a first optical communications device formed thereon;

c) a second circuit card mounted to another of said circuit card connectors, said second circuit card having a second optical communications device formed thereon; and

d) wherein said first and second circuit cards are maintained in fixed relationship to one another via said common backplane to effectuate optical intercard communications therebetween, said intercard communications being conducted independent of shock-susceptible wired connectors.